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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/774,238	02/06/2004	Holger Tank	63,227A	8680

25212 7590 07/11/2006

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9330 ZIONSVILLE RD  
INDIANAPOLIS, IN 46268

EXAMINER
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CLARDY, S

ART UNIT	PAPER NUMBER
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1617

DATE MAILED: 07/11/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/774,238

Applicant(s)

TANK ET AL.

Examiner

S. Mark Clardy

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE \_\_\_\_ MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 07 March 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-7 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-4 and 7 is/are rejected.
- 7) ☒ Claim(s) 5 and 6 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 7/9/2004.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_.

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Claims 1-7 are pending in this application which claims benefit of US Provisional Application 60/493,554, filed August 4, 2003.

Applicants' claims are drawn to aqueous herbicidal concentrate compositions (and method), with a viscosity of less than 140 centipoise<sup>1</sup>, consisting essentially of:

- A) water
- B) monomethylamine (MMA) or dimethylamine (DMA) glyphosate salt, >350 g/l
- C) surfactant (20 to 200 g/l); in claim 4:
  - (a) alkylamines/alkyletheramines
  - (b) quaternary ammonium surfactants (i) – (iv)
  - (c) amphoteric surfactants
  - (d) alcohol ethoxylates (glycol ethers)
  - (e) alcohol ethoxylate phosphate esters
  - (f) alkylpolyglycosides
  - (g) anionic alkylpolyglycoside esters

Whatever surfactant is used, it may not interact in a way that results in increased viscosity; viscous liquids are difficult to handle or accurately measure (para 4). The low viscosity of the compositions is attributed to MMA/DMA salt of glyphosate itself (para 8).

Applicants have addressed the issues outlined in the previous office action. However, upon further review, the following rejection must be made.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-4 and 7 are rejected under 35 U.S.C. 102(b) as being anticipated by Okano et al (US 6,030,923; US equivalent of PCT WO 97/16969).

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<sup>1</sup> A viscosity of <160 cP is less viscous than maple syrup (at 150 – 200 cP).

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Okano et al (US 6,030,923) had been considered, but not used under 35 USC 102(b), because there is absolutely no disclosure or suggestion that the compositions of Okano et al exhibit a viscosity below about 160 cP. This claim limitation is not present in the reference. Upon reconsideration, however, it appears that the Okano et al examples do anticipate the claims, even without addressing this claim limitation.

Okano et al teaches stable liquid agricultural compositions comprising:

- (a) an agricultural chemical
- (b) a cationic quaternary ammonium surfactant (I)
- (c) an acid amine salt (II)

Exemplified compositions in Okano et al (Table 1) comprise:

- (a) glyphosate (IPA, MMA, DMA salts)
- (b) Ethoquad C/12 or Ethoquad C/25<sup>2</sup>
- (c) octylamine or dimethyldecylamine hydrochloride
- (d) other miscellaneous surfactants.

The compositions of Okano et al may also contain additional thickeners (col 9, lines 5-18) as long as stability (phase separation) is not affected. The comparative testing of Table 1 demonstrates that the stability of the composition is achieved only by the addition of 1% octylamine or dimethyldecylamine hydrochloride which are known emulsifying agents. Without the amine salt component the composition degrades into two phases. Invention product 3 of Table 1 contains 53.3% MMA glyphosate and 2.5% Ethoquad C/25 (or 533 g/L and 25 g/L).

Applicants state that the low viscosity of their claimed compositions is the direct result of using the MMA or DMA glyphosate salts, rather than other more commonly used salts such as IPA, MEA, or K ("Summary", 1st para, or 20050032649, para 8). Therefore, this must be taken as an admission on the record that low viscosity is an inherent property of the MMA/DMA salt

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<sup>2</sup> Ethoquad C/25: POE(5)monomethylmonococoalkylammonium chloride; within applicants' (b)(iv) definition

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compositions as exemplified in Okano et al, Table 1. Regardless of whether Okano et al address the issue of viscosity, the examples of Table 1 contain the same claimed components, and thus exhibit the same properties, including low viscosity, that would inherently result from using the recited MMA/DMA salts.

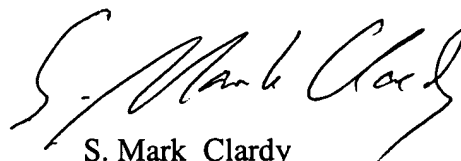
Claims 5 and 6 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

No claim is allowed.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to S. Mark Clardy whose telephone number is 571-272-0611. The examiner can normally be reached on 7:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sreenivasan Padmanabhan can be reached on 571-272-0629. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



S. Mark Clardy  
Primary Examiner  
Art Unit 1617

June 6, 2006